

WHAT IS CLAIMED IS:

1. A thermal interface for facilitating heat transfer from an electronic component to a heat sink comprising:
  - a) a generally planar substrate having first and second surfaces and  
5 defining a first continuous peripheral edge, said peripheral edge having a portion thereof extending substantially beyond the interface mating surface between said electronic component and said heat sink:
  - b) first and second layers of heat conductive compositions formed upon said respective first and second surfaces of said substrate, said heat conductive  
10 composition comprising:
    - i) 60% to 90% by weight of paraffin;
    - ii) 10% to 40% by weight of graphite; and
  - c) a layer of adhesive formed upon a respective one of said layers of heat  
conductive material, said adhesive layer being localized upon said portion of  
15 said peripheral edge extending substantially beyond said interface mating surface between said electronic component and said heat sink.
2. The thermal interface of Claim 1 wherein said substrate comprises a thermally conductive metal foil.
3. The thermal interface of Claim 2 wherein said foil is selected from the group  
20 consisting of copper, gold, silver and aluminum.
4. The thermal interface of Claim 2 wherein said substrate comprises aluminum foil having a thickness of approximately 0.002 inches.

5. The thermal interface of Claim 1 wherein said first and second layers of said heat conductive composition have a thickness of approximately 0.00065 inches.
6. The thermal interface of Claim 1 wherein said graphite of said heat conductive composition is present in an amount from 20% to 40% by weight.
- 5 7. The thermal interface of Claim 1 wherein said graphite of said heat conductive composition is present in an amount of approximately 35% by weight.
8. The composition of Claim 1 wherein said graphite and component of said heat conductive composition comprises generally spherical particles having a diameter equal to or less than six (6) microns.
- 10 9. The thermal interface of Claim 1 wherein said thermal composition further includes a polymer, said polymer being present in the amount up to 5% by the weight of said composition.
10. The thermal interface of Claim 9 where in said polymer comprises a synthetic resinous plastic material.
- 15 11. The thermal interface of Claim 1 wherein said first and second layers of heat conductive material are formulated to have a melting point of approximately 51°C or higher.
12. The thermal interface of Claim 1 wherein said thermal interface is provided with at least two (2) portions of said peripheral edge extending substantially beyond  
20 said interface mating surface between said electronic component and said heat sink.
13. The thermal interface of Claim 1 further comprising:
  - a) a peel-away protective layer formed to said adhesive; and

b) wherein peeling away such peel-away said protective layer exposes said layer of adhesive on said substrate so as to facilitate adhesive bonding of said thermal interface of said heat sink.

14. The thermal interface of Claim 13 wherein said peel-away protective liner  
5 comprises paper.

15. The thermal interface of Claim 13 wherein said peel-away protective layer  
comprises silicone-coated paper.

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